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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/624,634 | 07/23/2003 | Kyung-Geun Lee | 1293.1926 | 6894 |
| 49455 7590 08/17/2007 STEIN, MCEWEN & BUI, LLP 1400 EYE STREET, NW SUITE 300 WASHINGTON, DC 20005 | | | EXAMINER LAMB, CHRISTOPHER RAY | |
| | | | ART UNIT 2627 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--|-----------------------------------|--|
| Office Action Summary | Application No. 10/624,634 | Applicant(s) LEE ET AL. | |
| | Examiner Christopher R. Lamb | Art Unit 2627 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,7-11,14,15,17,22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,7-11,14,15,17,22 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 29th, 2007 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 7-11, 14, 22, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Kondo (US 5,177,720).

Regarding claim 1:

Kondo discloses:

An optical information storage medium (Fig. 8), comprising:

a user data area for recording user data (column 4, lines 1-15); and

an area other than the user data area (column 4, lines 1-15), comprising:

a reproduction-only area (it is a write-once disc, so any area already written to is a reproduction-only area); and

a recordable area wherein disk state data is recorded in the recordable area when a recording of a predetermined data is completed (column 7, lines 35-55), wherein the disk state data includes at least one of an address of a predetermined area of an optimum power control (OPC) area, an address of a predetermined area of a drive data area, and data representing whether an additional recording is possible after the recording of user data is completed (it is data representing whether an additional recording is possible: column 7, lines 15-55. There Kondo indicates that information necessary for generating TOC information includes the absolute "time of finishing all programs." This information indicates whether additional recording is possible: e.g., if the finishing time is the length of the disc, additional recording is not possible. Kondo also indicates that intermediate information including the information necessary for generating TOC information is stored every time recording is stopped. Thus data representing whether additional recording is possible is stored when a recording of predetermined data is completed.).

Regarding claim 2:

These limitations are not relevant. Claim 1 listed three alternate possibilities for the disc state data, and required only one to meet the claim. That is still true for claim 2. These limitations further define the OPC and drive data alternatives, but since Kondo recites the third alternative, whether additional recording is possible, meeting these limitations is not necessary to meet the claim.

Regarding claim 3:

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In Kondo the area other than the user data area corresponds to the lead-in area, and the new data about the disk state is recorded in the recordable area as part of the lead-in area (column 7, line 65 to column 8, line 25).

Regarding claim 4:

In Kondo, when data about the disk state is updated, the new data about the disk state is recorded in an area next to an area containing most recently recorded disk state data (column 7, line 65 to column 8, lines 25).

Regarding claim 7:

In Kondo, when data about the disk state is updated, the new data about the disk state is recorded in an area next to an area containing most recently recorded disk state data (column 7, line 65 to column 8, line 25).

Regarding claims 8-11 and 14:

These are method claims corresponding to claims 1-3, 4, and 7. All elements positively recited have already been identified with respect to earlier rejections. No further elaboration is necessary.

Regarding claim 22:

Kondo discloses a method of accessing an area on an optical storage medium where new user data is to be recorded, comprising:

recording, in a predetermined area of the optical storage medium, data about a disk state, when a recording of user data is completed (column 7, line 15 to column 8, line 25),

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wherein the data about the disk state includes at least one of an address of an area containing newly recorded optimum power control (OPC) data, an address of an area containing most recently recorded drive data, an address of an area containing most recently recorded user data, and data representing whether an additional recording is possible after the recording of user data is completed (it is the address of the area containing most recently recorded user data: column 7, lines 35-55; also, additionally, data representing whether additional recording is possible, as discussed in the rejection of claim 1); and

when new user data is to be recorded, accessing an area on the optical storage medium where the new user data is to be recorded, using recorded data about the disk state (column 7, line 15 to column 8, line 25).

Regarding claim 23:

In Kondo the predetermined area of the optical storage medium is a recordable area of a lead-in area on the optical storage medium (column 7, lines 40-55).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo in view of Fukushima et al. (US 2001/0036136).

Regarding claim 15:

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Kondo discloses an optical information storage medium as discussed above.

Kondo discloses wherein the recordable area comprises:

a disk zone to record data about the disk states (column 7, lines 40-50: the area where the intermediate TOC information is recorded is a disk zone to record data about the state of the disk).

Kondo does not disclose wherein the recordable area comprises:

an optimum power control zone to record data for optimal power control; and
a drive zone to record drive-related data.

Fukushima discloses wherein the recordable area of a disk comprises:

an optimum power control zone to record data for optimum power control (Fig. 4: 409);
a drive zone to record drive-related data (Fig. 4: 408).

Fukushima discloses this allows a drive to obtain appropriate recording and reproducing conditions (paragraph 85).

It would have been obvious to one of ordinary skill in the art to include in Kondo an optimum power control zone to record data for optimal power control, and a drive zone to record drive-related data.

The motivation would have been to obtain appropriate recording and reproducing conditions.

Regarding claim 17:

This is a method claim corresponding to claim 15 and is similarly rejected.

Response to Arguments

6. Applicant's arguments filed May 29th, 2007 have been fully considered. Some arguments were not persuasive, while others were. Each will be discussed.

Applicant first argues with the rejection of claim 1, etc., over Kondo. Applicant argues "Kondo does not teach or suggest a recordable area wherein disk state data is recorded in the recordable area when a recording of predetermined data is completed, Kondo simply teaches recording partial information each time a program is recorded."

This argument is not persuasive. A program in itself constitutes predetermined data. If Kondo records disk state data every time Kondo records a program, Kondo records disk state data every time predetermined data is recorded. Since the claim does not further define "predetermined data," this is a reasonable interpretation of the claim language.

Applicant next repeats this argument with respect to claim 8, etc.: it is no more persuasive relating to this claim than it was to claim 1.

Applicant next argues, with respect to claim 22, that Kondo does not teach or suggest recording disk state data when recording of user data is completed. However, when Kondo records a program, recording of that piece of user data has been completed, and as already discussed, Kondo records disk state data after a program is recorded. Therefore this argument is not persuasive.

Applicant next argues with the 102 rejection of claim 1, etc., over Fukushima. This argument is persuasive and the previous rejection has been withdrawn.

However, note that most of these claims remain rejected as anticipated by Kondo, while claims 15 and 17 have now been rejected as unpatentable over Kondo in view of Fukushima, as discussed above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Lamb whose telephone number is (571) 272-5264. The examiner can normally be reached on 9:00 AM to 6:30 PM Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Thang V. Tran/
Primary Examiner
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